



# Quick Help 9: Adding Sampling Units to a Project (IWMM)

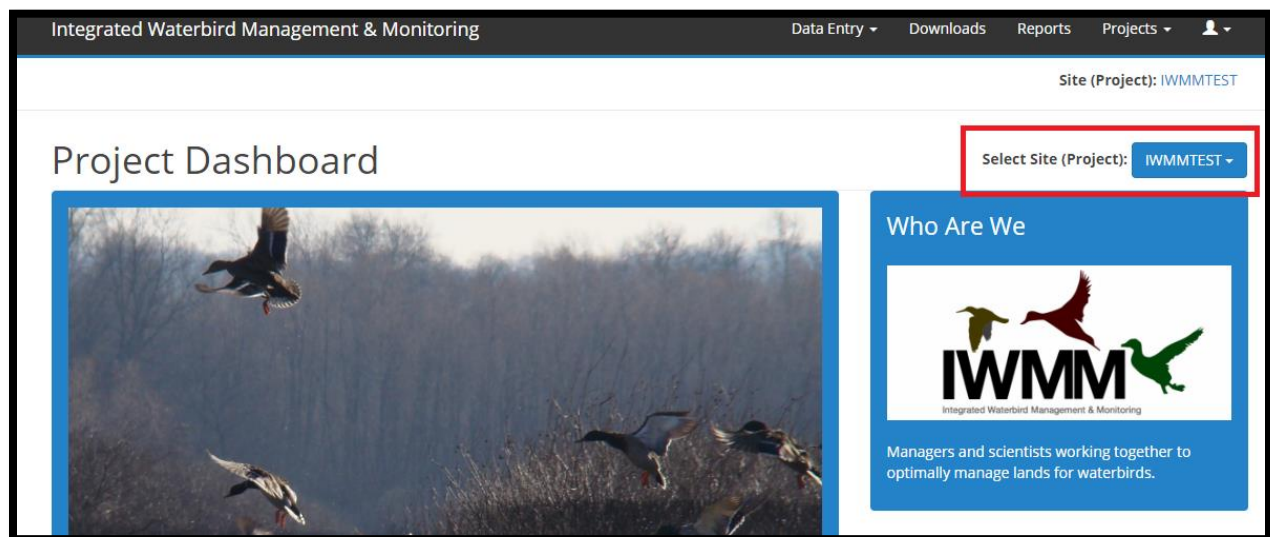
**Objective:** Users with IWMM data in the Avian Knowledge Network data management system (AKN) will learn how to create a study area and associated management units for their project.

**Audience:** Current, registered IWMM users with *Project Leader* access to a Project in the AKN.

## Step 1. Log in to the IWMM Portal

Before logging in, make sure that your Project has been created in the AKN and that an IWMM protocol has been assigned to it. You will not see your Project in the IWMM portal until you have assigned a valid IWMM protocol to it. For help with assigning protocols, please refer to the [AKN Quick Help Guide 4](#) in ServCat.

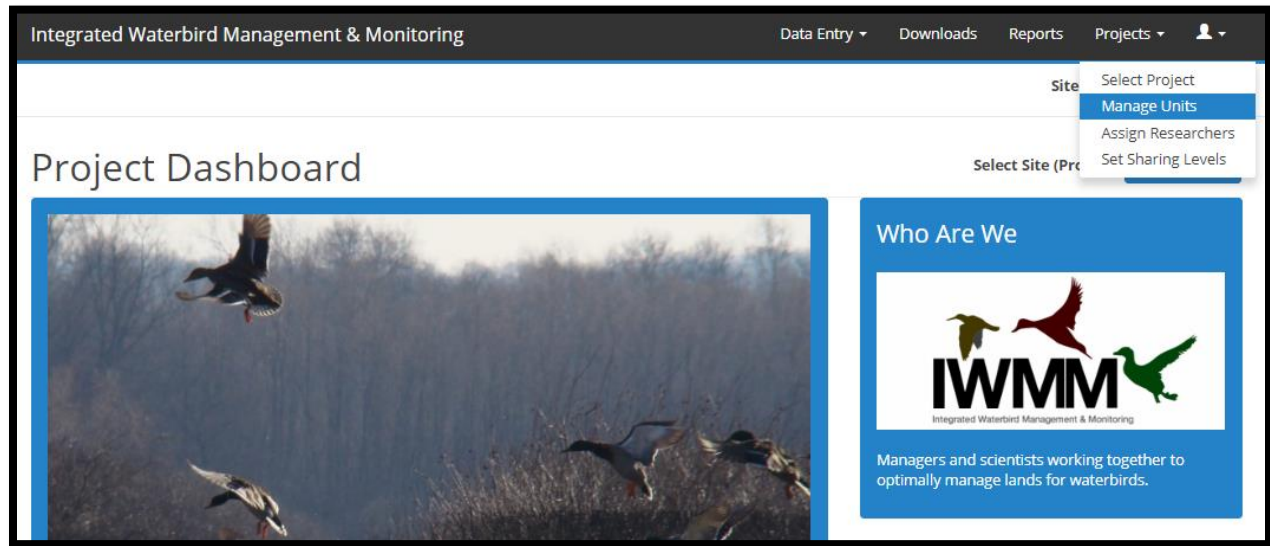
IWMM participants that have registered for an account in the AKN and have been assigned to a Project with *Project Leader* permissions may create and manage units for their Project(s) all within the [IWMM portal](#). Start by logging in to the portal and selecting your Project from the **Select Site (Project)** drop down menu.



With your Project selected, hover over the **Projects** tab and select **Manage Units**.



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### Step 2. Create a Study Area

Before creating individual management units, the first step is to create a study area. In the AKN, the study area provides a folder for independent studies or protocols that are being utilized by a Project. Within a study area there may be one or many management units. Since multiple protocols may be assigned to one Project (e.g., landbird or marsh bird), IWMM study areas are given a short name code to better identify them as specific to IWMM. To obtain a short name code for your study area, contact the [IWMM Project Coordinator](#).

Start by clicking on the Project's name in the sampling unit tree (it will highlight yellow). Select **online form** underneath the **Add Sampling Units under the highlighted feature** section.



## Avian Knowledge Network (AKN) Help Documentation

1) Select Project

Create and Manage Sampling Units

IWMMTEST - Test project for IWMM Beta testers **open new project**

Be sure you are working on the correct Project

Click on the Sampling Unit or Project you want to select (it will highlight yellow). Open any part of the tree to get to more detail. Hover on a tree node and the tooltip will tell you what type of feature it is.

**IWMMTEST - Test project for IWMM Beta testers**

Add Sampling Units under the highlighted feature with:

- online form
- GPS-U file
- Waypoint Plus file
- KML file
- SHP file

Update Sampling Unit geometry under the highlighted feature using:

- GPS-U file
- Waypoint Plus file
- KML file
- SHP file

Manage the highlighted feature:

- edit
- move in hierarchy
- delete

2) Select "online form"

Select **Study Area (Area)** from the list provided. Check that you are creating a study area 'As part of' **No other study area** and click **enter**.

Add a New Sampling Unit

\*Select your project IWMMTEST - Test project for IWMM Beta testers

As part of **No other study area**

**Add One**

\*Type(s) of sampling unit

- ☐ Blood Collection (Point or Area)
- ☐ Egg collection (Point or Area)
- ☐ Net (Point or Area)
- ☐ Other Banding Location (Point or Area)
- ☐ Other Bird Observation Point (Point)
- ☐ Other Nest (Point or Area)
- ☐ Predatory Fish Diet Collection (Point)
- ☐ Shorebird Area (Area)
- ☐ Shorebird Site (Area)
- ☐ Shorebird Subsite (Area)
- ☐ Specimen Collection (Point or Area)
- ☐ **Study Area (Area)**
- ☐ Target Species Sampling Area (Area)
- ☐ Territory (Point or Area)
- ☐ Trap (Point or Area)
- ☐ Weather Station (Point)

3) Click on Study Area (Area)

4) Click Enter

**enter**

**cancel**

Assign a "long" name to the study area. This is typically the name of the Refuge or official name of the study area (e.g. Ococoquan Bay NWR). If you haven't already, contact the [IWMM Project Coordinator](#) to obtain a "short" name for the study area. Provide a description for the study area that will be



## Avian Knowledge Network (AKN) Help Documentation

meaningful for current and future individuals interested in this Project's data. When you are finished, click **save**.

The screenshot shows the 'Add a New Sampling Unit' form. At the top, it says '\*Select your project' with 'IWMTEST - Test project for IWMM Beta testers' selected. Below this, it says 'As part of' with 'No other study area' selected. A red arrow points to the 'Add One' button, labeled '5) Assign Study Area name'. Below this, it says '\*Type(s) of sampling unit' with 'Study Area (Area)' selected. A red arrow points to the text input field for the name, labeled '6) Assign short name'. Below this, it says '\*Create a name for this sampling unit' and '\*Give this sampling unit a short name'. A red arrow points to the 'Description' text area, labeled '7) Add description (optional)'. At the bottom, there are buttons for 'Add to Calpi (optional)', 'save', and 'cancel'. A red arrow points to the 'save' button, labeled '8) Click "save"'.

### Step 3. Create Management Units

Start by clicking on the STUDY AREA name in the sampling unit tree (it will highlight yellow). Select **online form** underneath the **Add Sampling Units** under the highlighted feature section.

The screenshot shows the 'Create and Manage Sampling Units' page. At the top, it says 'IWMTEST - Test project for IWMM Beta testers' with an 'open new project' button. Below this, it says 'Click on the Sampling Unit or Project you want to select (it will highlight yellow)'. A red arrow points to the 'east unit (EU-001)' in the sampling unit tree, labeled '1) Select study area'. To the right, it says '2) Select "online form"'. Below this, it says 'Add Sampling Units under the highlighted feature with:'. There are five buttons: 'online form', 'GPS-U file', 'Waypoint Plus file', 'KML file', and 'SHP file'. A red box highlights the 'online form' button.

Check to see that you are creating a management unit '**As part of** Your Study Area'. Select **IWMM Management Unit (Area)** from the list provided. Click **enter** when you are ready.



## Avian Knowledge Network (AKN) Help Documentation

Integrated Waterbird Management & Monitoring

Data Entry - Downloads - Reports Projects -

Site (Project): IWMMTEST

### 3) Select "IWMM Management Unit (Area)"

**Project Leader**

Home Sampling Units Field Observations Load Observations in Bulk Project Definition

#### Add a New Sampling Unit

\*Select your project **IWMMTEST - Test project for IWMM Beta testers**

As part of **West Unit(WU-002)**

**Add One**

\*Type(s) of sampling unit

- ☐ Area Search Plot (Area)
- ☐ At-Sea Transect (Line or Area)
- ☐ Banding Net Collection (Area)
- ☐ Blood Collection (Point or Area)
- ☐ CTD Sample (Point)
- ☐ Depredation Plot (Point or Area)
- ☐ Diet Observations (Point or Area)
- ☐ Disturbance Plot (Point or Area)
- ☐ Egg collection (Point or Area)
- ☐ Fixed Radius Point Count Transect (None)
- ☐ Fixed Transect (Line)
- ☐ Forage Behavior Observation Point (Point or Area)
- ☐ Habitat Use Observation Point (Point or Area)
- ☐ Hydroacoustic Data Sample (Line)
- ☐ Index Plot (Point or Area)
- ☐ IWMM Management Unit (Area)
- ☐ Migration Observation Point (Point or Area)
- ☐ Nest Plot (Point or Area)
- ☐ Net (Point or Area)

**enter**  
**cancel**

#### 4) Click on enter

Assign a "long" name to the unit – use something meaningful to current and future staff. If you haven't already, contact the [IWMM Project Coordinator](#) to obtain a "short" name for the unit. You MUST use the short name given to you by the Coordinator. The short name serves to easily identify which units belong to the project and refuge and is important for analysis. When you are finished, click **save**. Repeat this process for all other management units under the IWMM study area.



## Avian Knowledge Network (AKN) Help Documentation

Integrated Waterbird Management & Monitoring

Data Entry • Downloads • Reports • Projects •

Site (Project): IWMMTEST

**Project Leader**

Home Sampling Units Field Observations Load Observations in Bulk Project Definition

**Add a New Sampling Unit**

\*Select your project **IWMMTEST - Test project for IWMM Beta testers**  
As part of **West Unit(WU-002)**

**Add One**

\*Type(s) of sampling unit **IWMM Management Unit (Area)**

\*Create a name for this sampling unit

\*Give this sampling unit a short name

Description

Digitize Location:

5) Add name

6) Add short name

7) Click Save

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### Step 4. Input Spatial Data

Spatial data may be entered via two ways: digitizing over imagery or uploading GIS files (KML, KMZ, or ArcGIS Shapefile). Regardless of the method you choose, all spatial data must use the WGS84 datum. Note that data in Web Mercator will not be accepted. If you receive an error upon uploading spatial information, confirm that it has been projected correctly in to WGS84. Contact the [IWMM Project Coordinator](#) if you are still experiencing difficulties.

#### 1.1 Digitizing sampling unit boundaries

From the sampling unit tree, select the study area or management unit you are interested in to add spatial information (it will highlight yellow) and click **edit**.





## Avian Knowledge Network (AKN) Help Documentation

Integrated Waterbird Management & Monitoring

Site (Project): IWMMTEST2

**Project Leader**

Home | Sampling Units | Field Observations | Load Observations in Bulk | Project Definition

### Create and Manage Sampling Units

IWMMTEST2 - IWMM Test 2 [open new project](#)

Click on the Sampling Unit or Project you want to select (it will highlight yellow). Open any part of the tree to get to more detail. Hover on a tree node and the tooltip will tell you what type of feature it is.

- ★ IWMMTEST2 - IWMM Test 2
  - CA Test Refuge (CA-001)
    - Foggy 2 (CA-001-AF)**
    - Foggy 3 (CA-001-AG)
    - Foggy Bottom (CA-001-C)
    - Pond 16 (CA-001-A)
    - Rainy Lake (RAINVLK)
    - Rabbit Ears 4 (CA-001-B)

**Add Sampling Units under the highlighted feature with:**

- [online form](#) [GPS-U file](#) [Waypoint Plus file](#)
- [KML file](#) [SHP file](#)

**Update Sampling Unit geometry under the highlighted feature using:**

- [GPS-U file](#) [Waypoint Plus file](#) [KML file](#)
- [SHP file](#)

**Manage the highlighted feature:**

- [edit](#) [move in hierarchy](#) [delete](#)

1) Select unit for which to add spatial boundary

2) Edit feature to add spatial boundary

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This will take you to the Google map screen where you will zoom into your Project area and digitize your unit or study area. Left click around boundary of unit to assign vertices. Once complete, click **keep it** to save edits. If you are experiencing difficulties digitizing your spatial information, contact the [IWMM Project Coordinator](#) for help.



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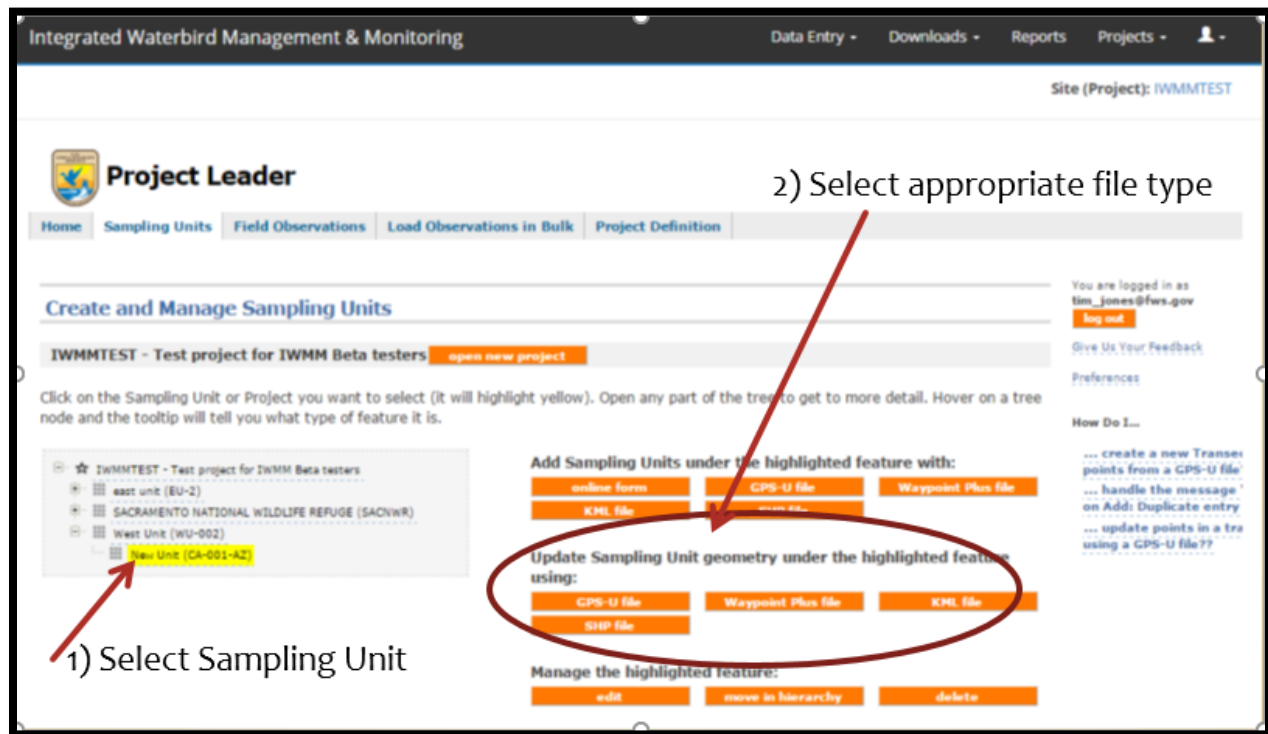
### 1.2 Uploading boundaries via files

From the sampling unit tree, select the study area or management unit you are interested in to add spatial information (will highlight yellow) and click on the appropriate file type.

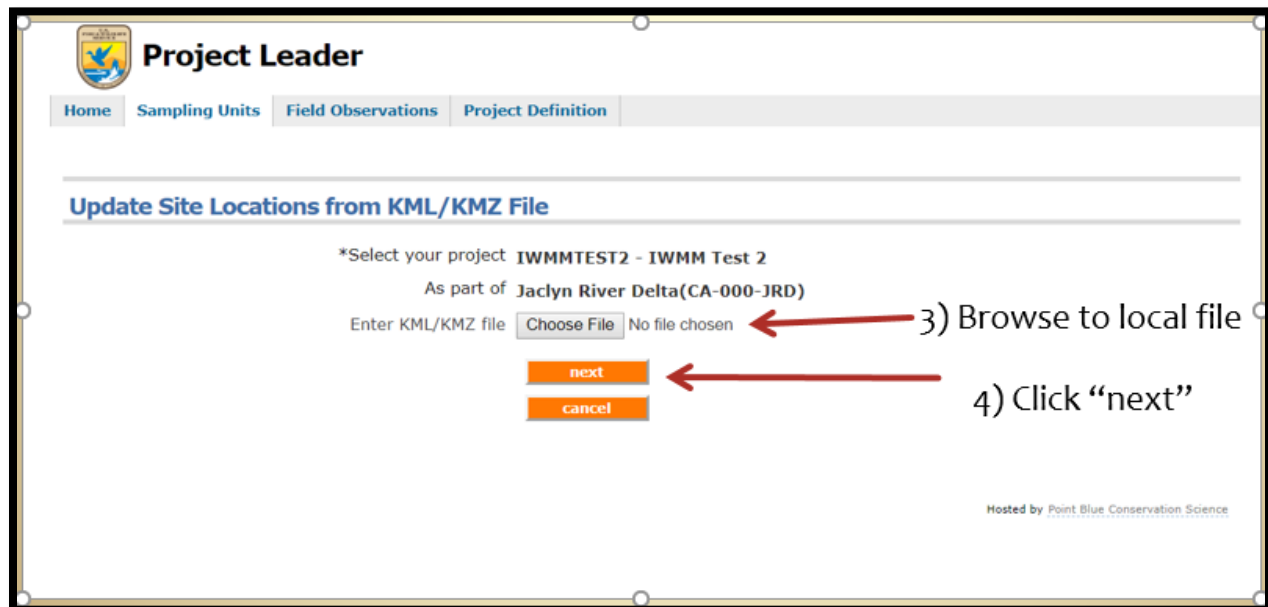




## Avian Knowledge Network (AKN) Help Documentation



Confirm that you are adding spatial information for the correct project and unit. Click **Choose File** to browse to the local file and then click **next**.



Select one or more units from the file you just uploaded and click **select** to bring it over. Then click **process**.



## Avian Knowledge Network (AKN) Help Documentation

Integrated Waterbird Management & Monitoring

Data Entry - Downloads - Reports Projects -

Site (Project): IWMMTEST

**Project Leader**

Home Sampling Units Field Observations Load Observations in Bulk Project Definition

**Add KML/KMZ Site Locations**

pointblue-org.mail.protection.outlook.com  
pointblue-org.mail.protection.outlook.com  
datasolutions@pointblue.org  
cadc\_webmaster@prbo.org  
DEJU Application Error in projectleaders

5) Select one or more units from the file you just uploaded

6) Click on 'select' to bring it over

7) Click on "process"

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\*Select your project **IWMMTEST - Test project for IWMM Beta testers**  
As part of **New Unit(CA-001-AZ)**  
\*Type(s) of sampling unit **IWMM Management Unit (Area)**  
**Add**

Select one or more KML/KMZ file entries, and click Select. Repeat for as many KML/KMZ file entries as you want. Click Clear All to start over.  
When finished, click Process to save everything to the database.

1. Select KML/KMZ entries to add and click Select.  
Use Shift or Ctrl click for selecting multiple entries.

2. Repeat. When finished, click Process to process list below.

SACRAMENTONRCA-001-AZUnit (CA-001-A) [polygon] **select** >>

**process** **clear all**

Nothing to process.

When finished, confirm that your unit(s) uploaded correctly by downloading and viewing them (see picture below). Repeat this process for any additional units.



## Avian Knowledge Network (AKN) Help Documentation

**Project Leader**

Home **Sampling Units** Field Observations Project Definition

Download  
Create and Manage

**Sampling Units - Download**

IWMTEST - Test project for IWMM Beta testers [open new project](#)

**Selecting Sampling Units:** Check all of the Sampling Units you want to select by clicking on each one. Open any part of the tree to get to more Sampling Units. To uncheck a Sampling Unit, click on it again. If you check or uncheck a Sampling Unit that contains other Sampling Units, the entire set of Sampling Units will be checked or unchecked. Click *Select All* to select and *Clear All* to unselect everything in the tree.

**1. Select sampling units from the tree below.**

[select all](#) [clear all](#)

- ☐ IWMTEST - Test project for IWMM Beta testers
  - ☐ east unit (EU-002)
  - ☐ Harrisleek (HN-1)
  - ☐ SACRAMENTO NATIONAL WILDLIFE REFUGE (SACNWR)
  - ☐ West Unit (WU-002)

**2. Download selected Sampling Units as:**

All coordinate data uses the WGS-84 datum.

- Sampling Units and center points (LatLong):

<a href="#">Text file</a>	<a href="#">CSV (Excel) file</a>
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- GPS locations (UTM):

<a href="#">GPS-U file</a>	<a href="#">Waypoint file</a>
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- GIS data:

<a href="#">ESRI Shape file</a>	<a href="#">Google Earth file</a>
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- **new!** Measurements (areas only):

<a href="#">Text file</a>	<a href="#">CSV (Excel) file</a>
<a href="#">HTML</a>	
- Sampling Unit heirarchy for entire project:

<a href="#">Text file</a>	<a href="#">HTML</a>
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Hosted by Point Blue Conservation Science

**1) Click on 'Download' under Sampling Units**

**2) Click on one or more boxes to select a unit**

**3) Click on one of the following to download a spatial file**